

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1-3 and 5-36 are pending; Claims 1, 5, and 22 are amended; Claim 4 is cancelled; and no claims are newly added. It is respectfully submitted that no new matter is added herewith.

Applicants acknowledge with appreciation the indication that Claims 17 and 36 are allowable. Applicants further acknowledge with appreciation the indication that Claim 34 contains allowable subject matter. However, because Claims 17, 34, and 36 have not been substantively amended herewith, these claims remain in their original form.

With regard to the rejection of Claims 1-36 under 35 U.S.C. § 112, first paragraph, that rejection is respectfully traversed.

As described in the specification at page 7, when the piston PT is operated, the cuff 20 is supplied with air, and is gradually inflated. As the air injection into the cuff 20 continues, the light-reception signal output from the light-receiving portions 18 stops fluctuating. This indicates a stopped blood stream state. More specifically, this indicates a state where the arterial vessel 90 is compressed to stop pulsating by expansion of the cuff 20. The blood pressure present during this state is measured by the pressure sensor 21, and is stored as the maximum blood pressure in a memory.

When the force by which the cuff 20 compresses the arterial vessel 90 is increased to a predetermined value, the piston operation is ended and air is discharged from the cuff 20. As air is discharged, the cuff pressure gradually decreases. During the decrease in the cuff pressure, the light reception signal output of the light-receiving portions 18 starts to fluctuate again. This means that the blood stream blockage is removed. The blood pressure present at

this time is also measured by the pressure sensor 21, and the result of this measurement is stored as a minimum blood pressure in the memory.

The Office Action states at page 3 that the pressure where fluctuations stop during inflation and the pressure where fluctuations start during deflation are inherently the same pressure. However, this statement is technically incorrect.

The maximum pressure is obtained at the point where fluctuations stop during inflation. Fluctuations stop because blood is building up in the artery toward the cuff. Essentially, the cuff serves to create a dam, stopping the blood flow. Therefore, when flow restarts, the pressure would not be the same, because the blood built up behind the dam of the cuff must be released. Therefore, it is evident that the maximum measured pressure and the minimum measured pressure would not inherently be the same. Accordingly, it is respectfully requested that this rejection be withdrawn.

Regarding the rejection of Claims 5, 22, and 35 under 35 U.S.C. § 112, second paragraph, this rejection is respectfully traversed. Claims 5 and 22 have been amended to remove the noted informalities. With regard to Claim 35, Claim 35 is not unclear, as is represents an alternative limitation to Claim 18, and these limitations are not contradictory. It is therefore respectfully requested that this rejection be withdrawn.

With regard to the rejection of Claims 1, 3-5, 11, 18, 20-22, and 27 under 35 U.S.C. § 102(e) as anticipated by Masuda, that rejection is respectfully traversed.

According to independent Claims 1 and 18, the maximum blood pressure value and the pulse wave when the blood pressure is the maximum are associated to each other, and the minimum blood pressure value and the pulse wave when the blood pressure is minimum are associated to each other.

Masuda describes a pulse wave measuring means for measuring a maximum blood pressure value, an average blood pressure value, and a minimum blood pressure value

according to an oscillometric method based on a change in amplitude of the pulse wave. This measurement is performed while a cuff is wrapped around an upper arm 12 of the patient.¹ According to Masuda, the pulse wave propagation time or the pulse wave propagation velocity is calculated based on the pulse wave, which is detected by the photoelectric pulse wave detecting probe, and the ECG waveform, which is successively detected by the ECG device. Then, the blood pressure value is successively determined according to the relationship between the propagation time or the propagation velocity and the pulse wave detected by the pulse wave detecting means such as the cuff.² According to Masuda, one of the maximum blood pressure value, the average blood pressure value, and the minimum blood pressure value, which are detected by the cuff, is selected, and the selected blood pressure value is associated to the propagation velocity.

By contrast, in the associating method according to independent Claims 1 and 18, the maximum blood pressure value and the pulse wave when the blood pressure is the maximum are associated to each other, and the minimum blood pressure value and the pulse wave when the blood pressure is minimum are associated to each other. As Masuda fails to disclose or suggest these features, it is respectfully submitted that Claims 1, 3-5, 11, 18, 20-22, and 27 patentably distinguish over Masuda. It is therefore respectfully requested that this rejection be withdrawn.

With regard to the remaining rejections of the pending claims under 35 U.S.C. § 103, Applicants note that these rejections are all based upon Masuda. As Masuda is deficient for the reasons described above, and the remaining references are not relied upon to provide the features identified as deficient within Masuda, it is respectfully requested that these rejections be withdrawn.

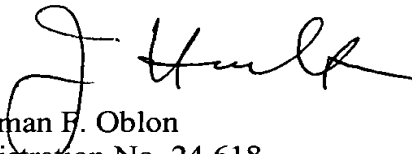
¹ Masuda, col. 8, line 59 – col. 9, line 5.

² Id. at col. 9, line 38–col. 10, line 13.

Consequently, in view of the foregoing discussion and present amendments, it is respectfully submitted that this application is in condition for allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Registration No. 24,618
Robert T. Pous
Registration No. 29,099
Attorneys of Record

Customer Number

22850

Tel.: (703) 413-3000

Fax: (703) 413-2220

NFO:RTP:KDP:la

I:\ATTT\KDP\215\210108US\210108US AM 3-01-04.DOC

James D. Hamilton
Registration No. 28,421